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# Plan of Action New Melones Revised Plan of Operations

## **Objective**

This document describes the process for developing a Revised Plan of Operations (RPO) for New Melones Reservoir. The RPO will replace the Interim Plan of Operations (IPO). The process will incorporate the best available science with regard to water quality and fishery flow objectives, as well as take into account actions, regulations and decisions that may affect the operations of New Melones Reservoir. The end result of the process will be a report that describes the RPO development and defines how New Melones Reservoir will be operated to meet regulatory commitments and demands for use of Central Valley Project (CVP) supplies from the Stanislaus River. The Bureau of Reclamation (Reclamation) will make the final decision on adoption and approval of an RPO in consultation with the US Fish and Wildlife Service (Service). In carrying out the implementation, any change in authorities or water rights will be requested from the Congress or State Water Resources Control Board (SWRCB), respectively. This document identifies the tasks and major milestones for the RPO.

## Background

The operating criteria for New Melones Reservoir are governed by Stanislaus River water rights, instream fish and wildlife flow requirements, temperature and dissolved oxygen (DO) requirements, Vernalis water quality and flow requirements from SWRCB Water Right Decision 1641 (D-1641), CVP contracts, and flood control requirements. Water released from New Melones Dam and power plant is re-regulated at Tulloch Reservoir, and is either diverted at Goodwin Dam or released from Goodwin Dam to the lower Stanislaus River. Releases into the lower Stanislaus River provide water for riparian water rights, instream fishery flow objectives, water temperature, and instream DO. Upon entering the San Joaquin River, the water contributes to flow and water quality conditions at Vernalis.

SWRCB Water Right Decision 1422 (D-1422), issued in 1973, provided the primary operational criteria for New Melones Reservoir. The decision permitted Reclamation to appropriate water from the Stanislaus River for irrigation, municipal, and industrial uses, yet requires that the operation of New Melones Reservoir include releases for existing water rights, fish and wildlife enhancement, and the maintenance of water quality conditions on the Stanislaus and lower San Joaquin rivers.

In June 1987 Reclamation and California Department of Fish and Game (DFG) executed an agreement entitled "Interim Instream Flows and Fishery Studies in the Stanislaus River Below New Melones Reservoir" (1987 Agreement). The 1987 Agreement specified interim releases from New Melones Dam to maintain instream flows that would be beneficial to fishery resources and habitat downstream from the dam. It increased the fisheries release by changing 98,300 acre-feet from the maximum to the minimum required, and allowed for releases as high as 302,100 acre-feet in wetter years. The 1987 Agreement also established a program of studies intended to identify the long-term

instream flow and determine measures to improve the survival of Chinook freshwater lifestages. The program is conducted jointly by Reclamation, DFG, and the Service.

The IPO was developed as a joint effort between Reclamation and the Service in conjunction with the Stanislaus River Basin Stakeholders (SRBS). The process of developing the plan began in 1995 with a goal to develop a long-term management plan, but the focus shifted in 1996 to development of an interim operations plan. Although meant to be a short-term plan for 1997 and 1998, the IPO continues in effect. The IPO defines categories of water supply based on storage and projected inflow, and then allocates annual water release for fishery, water rights settlement, water quality, Vernalis flow objectives, and use by CVP contractors (Table 1 and Table 2).

Annual water	March-September forecasted inflow plus end				
supply category	of February storage (thousand acre-feet)				
Low	0 - 1400				
Medium-low	1400 - 2000				
Medium	2000 - 2500				
Medium-high	2500 - 3000				

High

Table 1. Inflow Characterization for the New Melones Interim Plan of Operations

Table 2. New Melones Interim Plan of Operations Flow Objectives (in thousand acre-feet)

3000 - 6000

Storage plus inflow		Fishery		Vernalis water quality		Vernalis Flow		CVP contractors	
From	То	From	To	From	То	From	То	From	То
1400	2000	98	125	70	80	0	0	0	0
2000	2500	125	345	80	175	0	0	0	59
2500	3000	345	467	175	250	75	75	90	90
3000	6000	467	467	250	250	75	75	90	90

Agreements and decisions for the Delta and San Joaquin River also affect New Melones operations. In December 1994 the CALFED agencies, including Reclamation, signed the Bay-Delta Accord (Accord). Among the Delta specific requirements, the Accord also specified in-stream flows on the lower San Joaquin River (compliance point at Vernalis) for the benefit of Chinook salmon. A portion of Reclamation's contribution to the Vernalis flow requirement necessarily comes from New Melones. In May 1995 SWRCB adopted a Water Quality Control Plan (WQCP) for the Bay-Delta, which included water quality and flow objectives for the San Joaquin River Basin. The objectives in the WQCP were consistent with the 1994 Bay-Delta Accord.

Challenges to the scientific basis of the relationship between WQCP flow objectives and salmon survival resulted in collaboration of San Joaquin River interested parties to determine a program of study and allocation of responsibilities. The result was the San Joaquin River Agreement (SJRA), which includes the WQCP springtime river flows and the Vernalis Adaptive Management Plan (VAMP) to study the impact of flows, exports, and operation of a barrier at the head of Old River on salmon until 2012. The New Melones contribution to VAMP flows is based on operations consistent with the IPO until a long-term plan is developed. SWRCB D-1641, dated March 2000, implements the pertinent provisions of SJRA and the WQCP.

Public Law 108-361 Sec 103 d(2)(D)(vii) directs the Secretary of the Interior to update the New Melones operating plan to "reduce the reliance on New Melones Reservoir for meeting water quality and fishery flow objectives, and to ensure that actions to enhance fisheries in the Stanislaus River are based on the best available science." Other measures authorized in PL 108-361 under the Program to Meet Standards are meant to add flexibility to meet any obligations to the Central Valley Project contractors by reducing demand for water dedicated to meeting water quality standards in the San Joaquin River from New Melones Reservoir. In addition to updating the New Melones operating plan, the Program to Meet Standards actions include a recirculation program, best management practices plan for wildlife refuge drainage, and acquisition of water.

## RPO Process Description

Development of long term plan of operations for New Melones Reservoir will require balancing the competing needs in the basin. In addition to existing demands, ongoing and newly authorized projects and programs are underway that may change regulatory requirements of the CVP and resulting demands on New Melones Reservoir. These activities include, but are not limited to:

- Recirculation Pilot and Feasibility studies,
- Water purchases/transfers to offset New Melones Releases,
- Refuge drainage best management practice (BMP) development,
- Conditions of the 1987 DFG Agreement for the Stanislaus River,
- Best available science for fisheries protection in the Stanislaus and lower San Joaquin River,
- 2012 SJRA end/update
- Improved hydrology and salinity information for the San Joaquin River system.

The RPO process is designed to provide input and incorporate results from the above actions, as well as include changes to existing regulatory requirements such as from State and Regional Water Quality Control Board actions (Periodic Review, TMDL).

Because many of the above activities will require several years to develop meaningful results, a near term revision process will be initiated simultaneously to develop a transitional operation plan (TOP). The TOP will be implemented by 2007 and is intended to be in place for eight to ten years. Development of the TOP will incorporate updated hydrologic and water quality information and would be based upon a specified level of risk for drought occurrence during the life of the TOP.

## **Organization and Process**

Several groups will be formed to address the various tasks involved in the RPO development process. Each group will be chartered to define and guide the group's responsibilities, involvement, and relationship to the other groups. The interrelationship of the groups is illustrated in Figure 1. The following groups will be formed:

- Policy Group
- Biological Sciences Group
- Modeling Support
- Project Management Group
- Water Supply Group

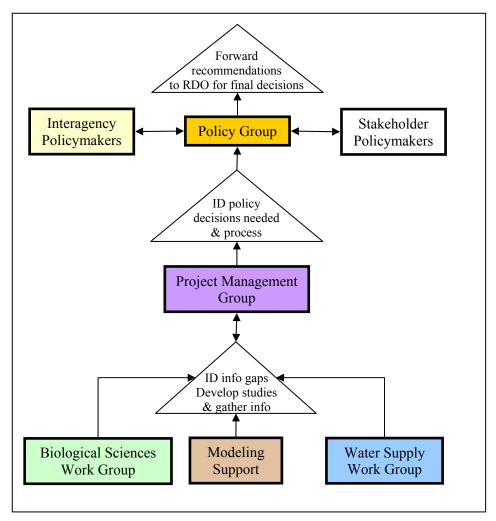


Figure 1. Group Process Relationships

## **Policy Group**

A policy group has been established to guide Reclamation Regional resources to complete the TOP and RPO. This group will provide for coordinated Regional and Area Office policies and approaches to issues or concerns related to the operation of New Melones Reservoir. This group will provide for efficient communication with and decision-making by the Regional Director.

Policy group members include managers representing the Central Valley Operations Office (CVOO), Central California Area Office (CCAO), South-Central California Area Office, Special Projects Office, Division of Resources Management, and Division of Planning. The team will meet monthly and will schedule policy-level meetings with other federal and state agencies, as well as with stakeholders.

The policy group will provide the coordination and policy direction for projects and activities related to the operation of New Melones Reservoir, and they will ensure that project decisions, regulatory changes, etc. are incorporated into the RPO process. Related projects and activities include those listed previously.

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#### **Project Management Group**

The project management (PM) group is an internal Reclamation group that will manage and coordinate the project process. The group has developed this project plan of action for review and approval by the Policy Group, and will administer tasks such as schedule, contracts, and meetings and records management. In addition, the PM group will communicate recommendations from the technical work groups to the policy group and identify decisions that need to be made by the policy group.

The group will be made up of the leadpersons from each of the technical work groups and will be lead by a project manager in the Division of Planning. The team will communicate weekly and meet at least monthly.

### **Technical Work Groups**

Two technical work groups will be established and will provide the primary opportunity for stakeholder involvement. Technical work groups will gather the available information needed to develop the TOP and RPO and identify the information gaps. Once the gaps are documented, the groups will develop studies, gather the needed information, and participate in new and ongoing activities and decisions that could impact New Melones Reservoir operations. The key responsibilities of these groups are to review and validate the information gathered to ensure best available science and to provide technical input to the policy group. Input from all participants will be considered, however consensus will not be sought. Technical work groups will be developed for biological sciences and water supply. A third team, internal to Reclamation, will perform the project modeling.

#### Biological Sciences Group

The biological sciences group is responsible for developing and analyzing information related to flows and temperatures for fish and habitat. The group will include representatives of the Service, National Marine Fisheries Service, and DFG, and may include self-identified individuals from the public, water agencies, environmental groups, local residents, and other interested stakeholders. Brian Deason of Reclamation's CCAO is the group leader.

## Water Supply Group

Water quality, supply and delivery concerns will be under the purview of the water supply group. The group will include representatives from Reclamation and any self-identified individuals from the public, other state, local, or federal agencies, or other organizations. Paul Fujitani of Reclamation's CVOO is the group leader.

## **Modeling Support**

A Reclamation team will provide modeling support to the technical groups. The modeling will apply the information assembled by the biological sciences and water supply groups as well as the priorities set by the policy group, and present results to each of the groups. The group will be made up of modelers from CVOO and the Division of Planning, and Ann Lubas-Williams is the team leader.

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#### **Task Descriptions**

#### **Project Management Tasks**

The key responsibilities of the project management group include providing coordination, communication, and documentation for the RPO process. These activities will span the entire duration of the RPO process. Specific tasks include:

- Plan and schedule meetings and conference calls for all groups;
- Prepare and distribute meeting agendas, and draft and final meeting notes for meetings and conference calls for all groups;
- Organize and maintain the official record for the RPO process;
- Coordinate activities and communication between the RPO groups; and
- Manage contracts, schedule and budgets.

In addition to the above activities, the project management group will also be responsible for an environmental status review to determine the environmental permitting and documentation required for the TOP and RPO.

Draft and final operations reports for the TOP and RPO will contain the development process, criteria, and methods used, as well as the operations plan. Stakeholder involvement will also be documented in the operations report. Documentation will be developed for the RPO to comply with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA).

#### **Biological Sciences Tasks**

The objective of the biological sciences group is to develop and recommend information related to flows and temperature for fish and habitat in the Stanislaus River. The group will gather existing fisheries and habitat information, determine what studies and additional data are needed, and then initiate the studies. Specifically, the group will evaluate the status of proposed study elements in the 1987 Agreement between DFG and Reclamation to identify what information and science is needed to address any outstanding elements and develop an acceptable instream flow schedule for the Stanislaus River. The group will also coordinate an independent team to review the data and study design. These independent reviews are to assure the quality of the science that will be the basis of fishery flow recommendations. At the completion of the field studies the biological sciences group will synthesize the results. With assistance from modeling support, the group will conduct modeling studies to examine the effect of operating the reservoir to optimize temperature and flows for fisheries enhancement.

## **Water Supply Tasks**

The objective of the water supply group is to develop information and recommendations related to water delivery and risk management, as well as meeting applicable water quality (salinity and dissolved oxygen) and flow requirements in the Stanislaus and lower San Joaquin Rivers. The group will perform studies to determine unimpaired flow and reservoir yield. With assistance from modeling support, the water supply group will consider various hydrologic model baselines against which the operation alternatives will

be compared. Additional tasks include making improvements to the groundwater relationship model and scoping and conducting studies of water supply and reliability.

After the water supply and biological sciences groups have completed their individual studies, the groups will merge to work together on developing modeling studies to look at alternative priorities for operations.

#### Schedule

TOP development and stakeholder input October 2005 – December 2006

TOP implementation 2007 water year

Biological Sciences Group fishery studies October 2005 – Spring 2009

Recommended minimum instream flow 2010

Water supply and risk operations studies 2010 - 2011

Reporting and Environmental Documentation 2012